HRL 12-80 X

12V 80Ah

ASTERION HRL-X are sealed maintenance-free lead-acid batteries with gas recombination system (VRLA). Are manufactured by AGM technology (electrolyte absorbed in glass fiber separators).

Thanks to the use of modern technologies in production, batteries demonstrate high operation stability and highest quality. HR refers to a range of ASTERION UPS series, specifically designed for use in UPS Data Centers, communication systems and other equipment. The series is highly reliable and has a service-life up to 12 years.

Battery construction

Element	Positive plate	Negative plate	Case	Lid	Valve	Terminal	Separator	Electrolyte
Material	Lead dioxide	Lead	ABS		Rubber	Copper	Fiberglass	Acid

Specifications

Nominal voltage.....12 V
Cell.....6
Design life.....10-12 years
Nominal capacity (25°C)
10 hours rate (8 A; 1,8 V/cell).....80 Ah
5 hours rate (13,8 A; 1,75 V/cell).....69 Ah
1 hours rate (58 A; 1,65 V/cell).....58 Ah
Self-discharge.....3% capacity per month 20°C

Internal resistance (25°C).....4,7 mΩ

Operating temperature range

Discharge.....-20÷60°C
Charge.....-10÷60°C
Storage.....-20÷60°C
Maximum dischsrge current (25°C).....750A (5sec)
Cycle mode (2,35÷2,4 V/cell)
Max.charge current.....24 A
Temperature correction factor.....30 mV/°C
Standby mode (2,27÷2,3 V/cell)
Temperature correction factor.....20 mV/°C

Performance & characteristics

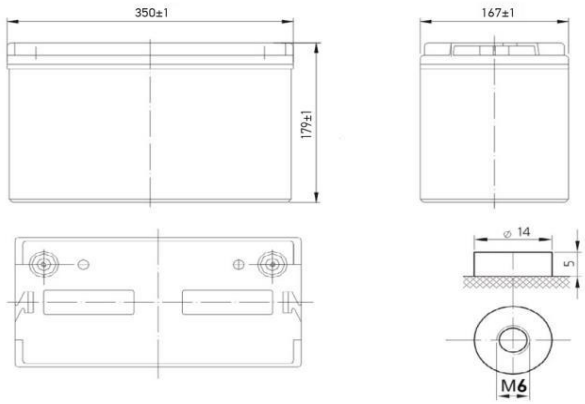
- AGM technology allows to recombinate 99% of the generated gas;
- No restrictions on air transportation;
- Compliance with the UL requirements;
- Lead plates, alloyed by calcium, provide high energy density;
- Maintenance-free. Do not require distillate topping;
- Long service life;
- The battery case is made of flame-retardant ABS plastic.

Dimensions (±2mm)

Length, mm.....350
Width, mm.....167
Height, mm.....179
Height over terminals, mm.....179
Weight (±3%), kg.....24,2

Application

- Uninterruptable power supply
- Back up power supply
- Communication system
- Power engineering facilities
- Renewable energy systems

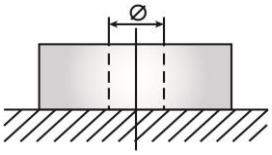


Layout

B

Terminal type

Insert Ø6 mm



Discharge Constant Current, A (25°C)

V/cell	5 min	10 min	15 min	30 min	45 min	1 h	3 h	5 h	10 h
1,60	276	213	168	104	75,8	59,9	21,9	15,7	9,01
1,65	260	201	160	99,0	71,9	58,0	21,4	15,1	8,68
1,70	245	189	151	93,8	68,2	54,8	20,9	14,5	8,38
1,75	227	178	143	88,7	64,8	52,0	19,9	13,8	8,09
1,80	219	172	137	86,0	63,1	50,2	19,5	13,5	8,00

Discharge Constant Power, W/cell (25°C)

V/cell	5 min	10 min	15 min	30 min	45 min	1 h	3 h	5 h	10 h
1,60	499	377	290	178	133	104	38,7	28,2	14,8
1,65	483	362	279	172	129	102	37,9	27,8	14,7
1,70	462	351	270	168	125	97,2	37,5	27,0	14,5
1,75	423	337	260	160	121	95,4	36,7	26,6	14,4
1,80	418	321	250	155	117	92,2	35,9	26,0	14,1